

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the subject application.

1-4. (Cancelled)

5. (Previously Presented) The endoscope imaging system according to Claim 10, wherein the video signal processing circuit provides an enlarge/reduce processing function for performing horizontal enlargement or reduction based on a ratio between the first frequency and the second frequency.

6. (Previously Presented) The endoscope imaging system according to Claim 5, wherein the image processing unit further comprises:

superimposing means for superimposing an externally input image signal on an image-captured signal processed in the video signal processing circuit; and

superimposing position control means for controlling a superimposing position of the externally input image signal in coordination with the image pickup element.

7. (Cancelled)

8. (Cancelled)

9. (Previously Presented) The endoscope imaging system according to claim 11, wherein the image pickup system is provided in a first camera head for an endoscope, and the second image pickup system is provided in a second camera head for an endoscope.

10. (Currently Amended) An endoscope imaging system comprising:

an endoscope for photoelectrically converting an optical image of a subject and outputting an image-captured signal; and

an image processing unit, to which the endoscope is detachably connected, ~~and which processes~~ for processing the image-captured signal from the endoscope[[;]],

wherein the endoscope comprises:

an image pickup element [[with]] comprising one image-capture surface constructed with a plurality of scanning lines and driven by a pickup drive signal, wherein each of the plurality of scanning lines comprise a first number of pixels;

a drive circuit for generating and outputting the pickup drive signal to the image pickup element, the pickup drive signal ~~comprising~~ having a first frequency based on the first number of pixels for sequentially reading an image signal captured on the image-capture surface of the image pickup element for every scanning line; and

a frequency dividing circuit ~~which divides~~ for dividing a clock signal [[at]] , having a preset frequency and being supplied by the image processing unit, to generate:

a driving clock signal ~~for the drive circuit at~~ having the first frequency to be used by the drive circuit to generate and output the pickup drive signal,

a writing signal having the first frequency for writing the image-captured signal read from the image pickup element to a line memory, and

a reading signal having a second frequency higher than the first frequency
for reading the image-captured signal from the line memory; and

wherein the image processing unit comprises:

[[a]] the line memory having a memory capacity, which can store capable of
storing one scanning line of image-captured signals read from the image pickup element and
written to the line memory;

an oscillator for generating the clock signal having the preset frequency; and

a video signal processing circuit for performing video signal processing on the
image-captured signals stored in the line memory and read from the line memory with a reading
signal at [[a]] the second frequency; and

~~wherein the endoscope further comprises:~~

~~a writing signal generating circuit for generating and outputting a writing signal at~~
~~the first frequency to the line memory for writing the image-captured signal to the line memory,~~
~~which first frequency writing signal derived from the clock signal with the preset frequency; and~~

~~a reading signal generating circuit for generating and outputting a reading signal~~
~~with a second frequency, which is higher than the first frequency, to the line memory for reading~~
~~image-captured signals stored in one scanning line therein, which second frequency reading~~
~~signal derived from the clock signal with the preset frequency.~~

11. (Currently Amended) An endoscopic imaging system comprising:

an endoscope[[,]] for photoelectrically converting an optical image of a subject and
outputting an image-captured signal[[,]]; and

a camera control unit ~~which processes~~ for processing the image-captured signal from the

endoscope[[]],

wherein the endoscope comprises an image pickup system for imaging a subject, said image pickup system comprising:

a first image pickup unit [[with]] comprising:

a first image pickup element [[with]] comprising one image-capture surface constructed with ~~for capturing~~ a plurality of scanning lines, wherein each ~~scan line~~ of the plurality of scanning lines comprises a first number of pixels, ~~the first image pick-up unit comprising~~;

a first drive circuit for generating and outputting a first drive signal for the first image pickup unit to sequentially read each scanning line of an image captured by the one image capture surface of the first image pickup element, wherein the first drive signal oscillates at a first frequency correlated to the first number of pixels;

a first frequency dividing circuit ~~which divides~~ for dividing a clock signal having a preset frequency to generate and output a first clock signal at [[a]] the first frequency, which ~~first clock signal~~ is provided to the first drive circuit to generate the first drive signal; and

a first writing signal generating circuit for generating and outputting a first writing signal using the first clock signal at the first frequency to sequentially write each scanning line of an image-captured by the one image capture surface of the first image pickup element, wherein the first writing signal oscillates at the first frequency of the first clock signal; and

a second image pickup unit [[with]] comprising:

a second image pickup element comprising one image-capture surface constructed with ~~for capturing~~ a plurality of scanning lines, wherein each ~~scan line~~ of the

plurality of scanning lines comprises a second number of pixels, which is larger than the first number of pixels, ~~the second image pickup unit comprising:~~

a second drive circuit for generating and outputting a second drive signal for the second image pickup unit to sequentially read each scanning line of an image captured by the one image capture surface of the second image pickup element, wherein the second drive signal oscillates at a second frequency correlated to the second number of pixels;

a second frequency dividing circuit ~~which divides~~ for dividing the clock signal having a preset frequency to generate and output a second clock signal at the second frequency, which ~~second clock signal~~ is provided to the second drive circuit to generate the second drive signal; and

a second writing signal generating circuit for generating and outputting a second writing signal using the second clock signal at the second frequency to sequentially write each scanning line of an image-captured by the one image capture surface of the second image pickup element, wherein the second writing signal oscillates at the second frequency of the second clock signal;

wherein the camera control unit comprises:

a line memory for sequentially storing image-captured signals for one scanning line ~~[[one]]~~ of the first and second image pickup units in coordination with a corresponding one of the first and second writing signals connected to the camera control unit;

a clock for generating a clock signal at said preset frequency for use by the first and second image pickup units;

a reading circuit for reading image-captured signals for one scanning line which are output and stored in the line memory using the second frequency signal; and

a video signal processing circuit for performing video-signal processing on the image-captured signals read from the line memory by the reading circuit using the second frequency signal; and

wherein the camera control unit detachably connects to the endoscope.